AIR CYCLE AIR CONDITIONING WITH ADAPTIVE RAM HEAT EXCHANGER

ABSTRACT OF THE DISCLOSURE

An air conditioning pack for an aircraft provides primary and secondary heat exchangers arranged in a ram air duct. A third heat exchanger is arranged in the ram air duct and is fluidly connected to the primary and secondary heat exchangers. The overall or combined size of the primary, secondary, and third heat exchangers is less than that of the typical primary and secondary heat exchangers of the prior art. A combination of heat exchangers is used to provide cooling during worst case scenarios enabling efficient use of the overall heat exchanger configuration to provide the desired cooling capacity.

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